VSR CIVIL INFRA PVT. LTD.

VSR/BBMP/YNKD/W.No.03-004/2019-20 **Date. 07.02.2020**

CERTIFICATE

Division : Yelahanka

Sub Division : Yelahanka Satellite Town Sub Division

Ward No : 03

Ward Name : Attur

Job Code No: 003-20-000071

Name of Work : Construction of RCC Drains and Culverts at Best County-II and III and G Ramaiah layout, Sai Archid and surrounding area in Ward No .03 Yelahanka Satellite Town Sub Division.

Contractor Name : M/S. Technical Manager (West), KRIDL , Bangalore.

Work Order No :BBMP/EE/YNK.D/W.O/188/2019-20

Running Account Bill : 2nd and Part Bill

BR No :

Value of Work Completed by Contractor,Amount : Rs.1,38,46,600.00

This is to certify that all the Items of Works have been carried out satisfactorily as per Specifications and Conform to MORTH.

for VSR Civil Infra Pvt. Ltd

VSR CIVIL INFRA PVT. LTD. BANGALORE

(Authorized Signatory)
Project Management Consultants

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ
ಯಲಹಂಕ ಉಪನಗರ ಉಪವಿಭಾಗ,
ಬಿ.ಬಿ.ಎಂ.ಪಿ. ಬೆಂಗಳೂರು-10೯

AE

#552/B, 6th Main Road, Hanumantanagar,Bengaluru – 560 019000. Cell : 9845230975
E-mail : vsrcivilinfra@gmail.com

VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 15.12.2019

TEST REPORT

CLIENT	:	Executive Engineer, Yelahanka Division, BBMP, Bengaluru.
AGENCY	:	M/s. Technical Manager (West), KRIDL, Bengaluru
NAME OF THE WORK	:	Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division
SAMPLE ID	:	Cement (ACC – OPC 53 Grade)
DATE OF MANUFACTURE	:	November - 2019
DATE OF TESTING	:	13.12.2019 to 15.12.2019
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part -5)	140 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	455 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	29.00 %	-

Note:

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20 Date: 17.12.2019

TEST RESULTS OF PHYSICAL PROPERTIES OF REINFORCEMENT STEEL

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.
Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru
Name of Work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division
Sample Identification : 8mm,10mm,12mm Fe 500 TMT Bars
Technical Reference : IS 1786:2008, IS 1608:2005, IS 1599:1985 (Reaffirmed 2006)
Date of test : 17.12.2019

S.No	Brand	Nominal size (dia in mm)	Mass per metre (kg/metre)	TENSILE STRENGTH		
				0.20 % proof stress/ yield stress ($N/mm^{2)}$	Tensile strength ($N/mm^{2)}$	Elongation, percent on gauge length
1	Fe 500	8	0.33	531	541	13.5
2	Fe 500	10	0.65	545	553	14
3	Fe 500	12	0.84	557	566	15

Remarks:

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 12.01.2020

PRECAST SLAB 250mm Thick(CORE) TEST REPORT

Client	:	**Executive Engineer**, Yelahanka Division, BBMP, Bengaluru.
Contractor	:	**M/s. Technical Manager (West)**, KRIDL, Bengaluru
Name of Work	:	Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division
No.of Sample Tested	:	03
Date of Testing	:	12.01.2020
Techinical Reference	:	IS:516-1959 (Reaffirmed 1999), SP-24:1983.
Grade of Concrete	:	M_{20}

Sl. No.	Dia of Core D (mm)	Height of Core H (mm)	Core Wt (Kg)	Density of Core (kg / m^3)	H / D	Correction factor (Based on H/D)	Failure Load (kN)	Core Strength (N/mm^2)	Correction Factor for the Dia. (Strength of the Core x L08)	Corrected Cylinder Compressive Strength (N/mm^2)	Equivalent Cube Compressive Strength (N/mm^2)
1	100.00	171.00	3.111	2316.40	1.71	0.960	143.50	18.27	19.73	18.94	23.68
2	100.00	172.00	3.189	2360.67	1.72	0.960	141.60	18.03	19.47	18.69	23.37
3	100.00	174.00	3.265	2389.15	1.74	0.960	137.40	17.49	18.89	18.14	22.67

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 29.12.2019

TEST REPORT ON CONCRETE CUBES

Client	: **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.
Agency	: **M/s. Technical Manager (West),** KRIDL, Bengaluru
Name of the work	: Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division
Sample ID	: Cement Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	22.12.2019	29.12.2019	8.163	352.6	15.67
2	22.12.2019	29.12.2019	8.154	348.1	15.47
3	22.12.2019	29.12.2019	8.162	361.8	16.08

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 19.01.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	22.12.2019	19.01.2020	8.232	502.3	22.32
2	22.12.2019	19.01.2020	8.254	523.6	23.27
3	22.12.2019	19.01.2020	8.265	512.4	22.77

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Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 20.01.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	23.12.2019	20.01.2020	8.241	516.3	22.95
2	23.12.2019	20.01.2020	8.232	523.4	23.26
3	23.12.2019	20.01.2020	8.254	512.7	22.79

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 31.12.2019

TEST REPORT ON CONCRETE CUBES

Client	: **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.
Agency	: **M/s. Technical Manager (West),** KRIDL, Bengaluru
Name of the work	: Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division
Sample ID	: Cement Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 7th day

SLNo.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	24.12.2019	31.12.2019	8.174	352.6	15.67
2	24.12.2019	31.12.2019	8.165	348.1	15.47
3	24.12.2019	31.12.2019	8.192	362.5	16.11

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 01.01.2020

TEST REPORT ON CONCRETE CUBES

	: **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.
f	: **M/s. Technical Manager (West),** KRIDL, Bengaluru
of the work	: Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division
le ID	: Cement Concrete
of cubes	: 150mmx150mmx150mm
s Sectional Area	: 22500 mm^2
nical Reference	: IS: 516-1959 (Reaffirmed 2008)
de of Concrete	: M_{20}
npressive Strength as on	: 7th day

l.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.12.2019	01.01.2020	8.174	355.6	15.80
2	25.12.2019	01.01.2020	8.163	362.5	16.11
3	25.12.2019	01.01.2020	8.154	371.8	16.52

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 01.01.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive trength (N/mm^2)
1	25.12.2019	01.01.2020	8.165	365.2	16.23
2	25.12.2019	01.01.2020	8.197	362.5	16.11
3	25.12.2019	01.01.2020	8.123	352.6	15.67

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Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 01.01.2020

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Yelahanka Division, BBMP, Bengaluru.

Agency : **M/s. Technical Manager (West),** KRIDL, Bengaluru

Name of the work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.12.2019	01.01.2020	8.169	348.2	15.48
2	25.12.2019	01.01.2020	8.184	353.6	15.72
3	25.12.2019	01.01.2020	8.173	362.4	16.11

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VSR CIVIL INFRA PVT. LTD.

Engineering Project Consultants

Job No.: VSR/BBMP/KRIDL/W.No.03/2019-20

Date: 22.01.2020

TEST REPORT ON CONCRETE CUBES

Client : Executive Engineer, Yelahanka Division, BBMP, Bengaluru.

Agency : M/s. Technical Manager (West), KRIDL, Bengaluru

Name of the work : Construction of RCC drains and culverts at Best county-II and III and G-Ramaiah layout, sai Archid and surrounding area in ward no: 03 Yelahanka satellite Town Sub division

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.12.2019	22.01.2020	8.235	506.3	22.50
2	25.12.2019	22.01.2020	8.215	523.4	23.26
3	25.12.2019	22.01.2020	8.226	532.1	23.65

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